Akobo County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations

December 2019: **INT Risk Level[1]** **Very High**

August 2019: **INT Risk Level** **Very High**
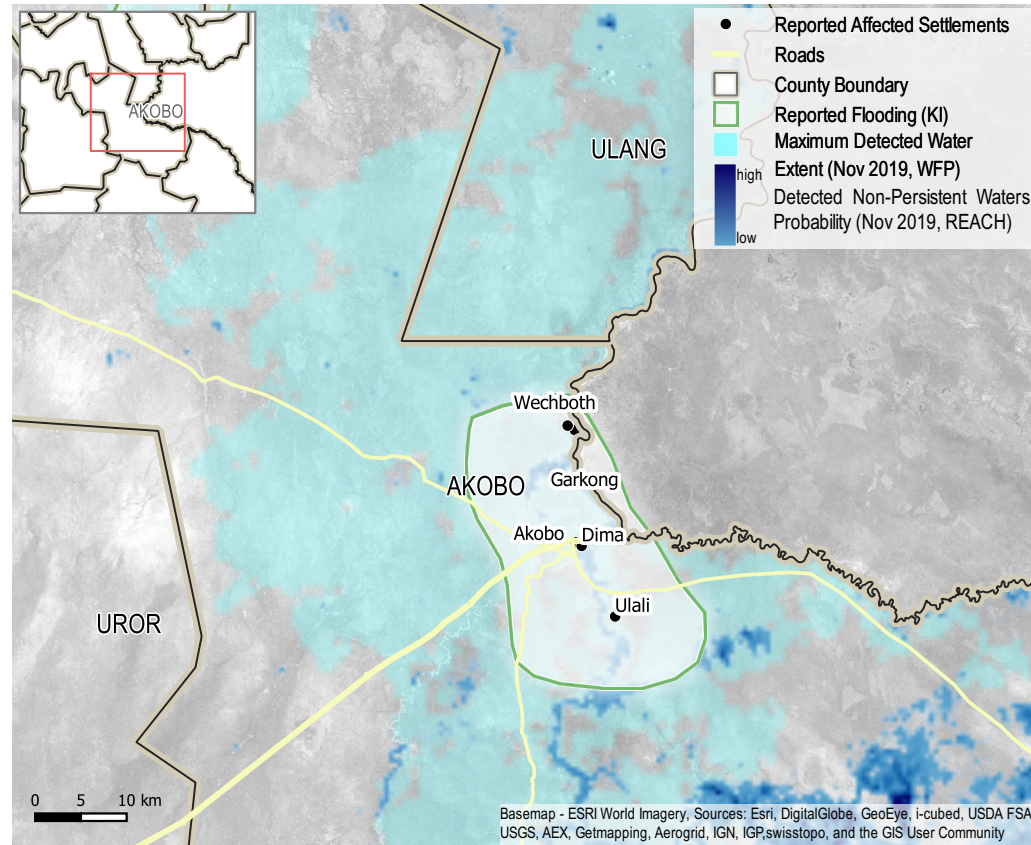
IPC FSL Projection (Sept - Dec): **3**

IPC FSL: **4**

IPC Nutrition Projection (Sept - Dec): **4**

IPC Nutrition: **4**

Individuals affected: 5,000-25,000
The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) (high / low)

ULANG, AKOBO, UROR

Settlements: Wechboth, Garkong, Akobo - Dima, Ulali

0 5 10 km

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community
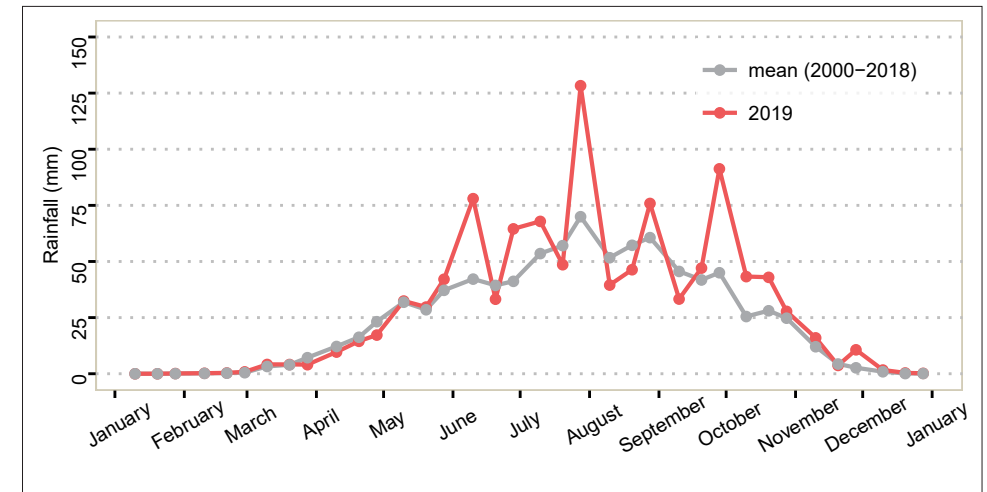
This map displays the approximate extent of flooding in the assessed area, obtained through two sources: participatory mapping and remote sensing[3]. The blue areas on the map are the result of remote sensing: light blue represents all areas covered by water in November 2019 while the dark blue shows detected standing water that was present in November, but absent in February (during the dry season) and thereby indicates areas which were likely flooded.

The flooded areas drawn through participatory mapping reflect the situation as perceived by local community members in July-October, 2019. Both methodologies have drawbacks, so this map allows for triangulation and aims to show the most complete picture possible.

Introduction

In 2019, unprecedented flooding reportedly washed away crops, destroyed homes, and contaminated water sources, as well as restricted access to critical basic services in parts of the country. In October 2019 , REACH produced factsheets to support the prioritisation of flood-affected counties based on underlying vulnerabilities and expected impact on emergency needs. To guide the IPC analysis teams, REACH updated the October 2019 factsheets with new information obtained from additional KI interviews and remote sensing from November 2019, to better understand the current and potential future impact on food security.

Average County Rainfall[2]

- mean (2000–2018)
- 2019

Impact of Flooding (as reported by KIs)

• Akobo was projected by the IPC to have a 20% decrease in acute food insecurity. Flooding is still disrupting livelihoods and cultivation and likely limiting seasonal improvements from the harvest. Settlements are reportedly still isolated, with limited access to other services.

• The food price index (JMMI)[4] has increased by 14% since August, which is likely attributable to lower food availability.

• Micro levels of displacement to the highlands to avoid the flooded area with limited options to move to other locations were reported. Humanitarian Food Assistance is considered a large pull factor into Akobo town. Reported movement into Gambella is not directly linked to flooding.

• The Integrated Needs Tracking (INT)[1] system suggests that the risk of emergency needs increasing starts to increase after a flooding event – with the number of INT indicators at or above a 'high' risk increasing from 5 to 12 between August and December.

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.

2. Early Warning Signs: https://earlywarning.usgs.gov/fews/ewx/index.html?region=af as of January 2020

3.The approach employed by REACH analysed Sentinel 1 imagery taken 01- 10 November 2019. Remote sensing may seriously underestimate or overestimate the presence of standing floodwater due to backscattering of the radar signal and smoothing of pixels. This is a preliminary analysis and the results have not been validated in the field. Please send feedback to REACH.

4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Funded By: European Union Civil Protection and Humanitarian Aid

USAID FROM THE AMERICAN PEOPLE

REACH An initiative of IMPACT Initiatives, ACTED and UNOSAT

Duk County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations

🏚 **Individuals affected: 25,001-50,000**
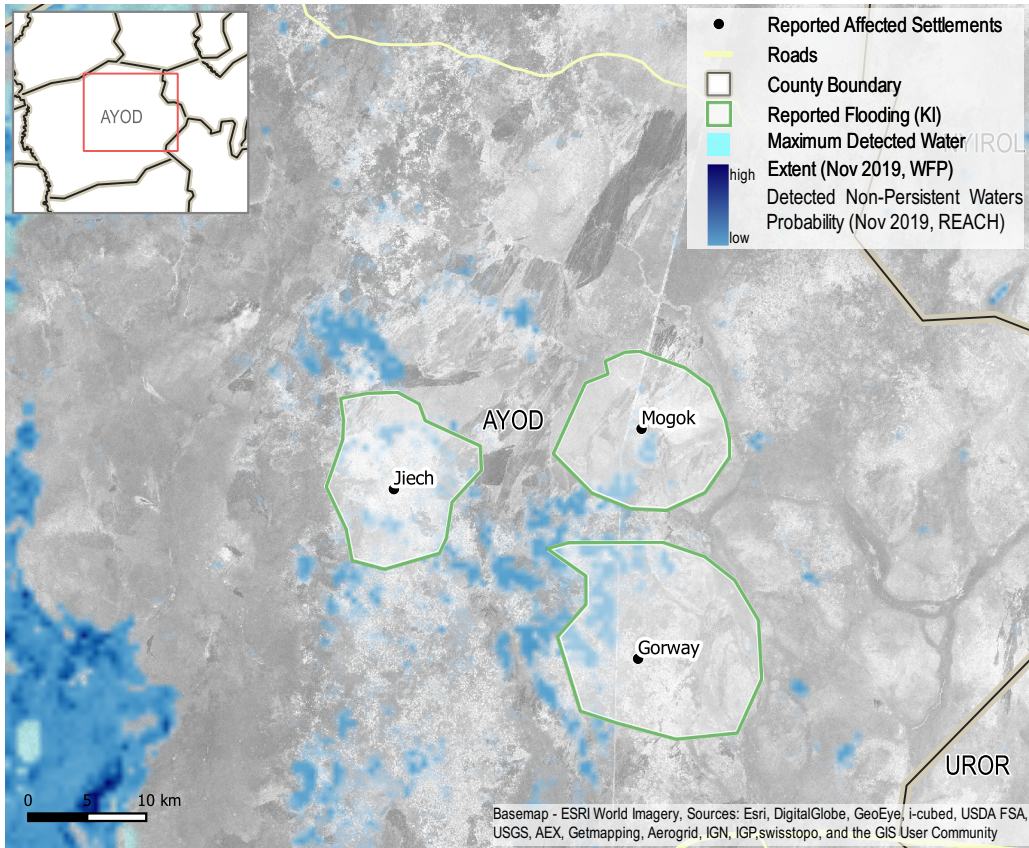The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

| December 2019: | **INT Risk Level**[1] | **Very High** |
| August 2019: | **INT Risk Level** | **Very High** |

| 🍲 | **IPC FSL Projection** (Sept - Dec): | **4** |
| 🍚 | **IPC FSL:** | **4** |

| 😷 | **IPC Nutrition Projection** (Sept - Dec): | **4** |
| 😷 | **IPC Nutrition:** | **4** |

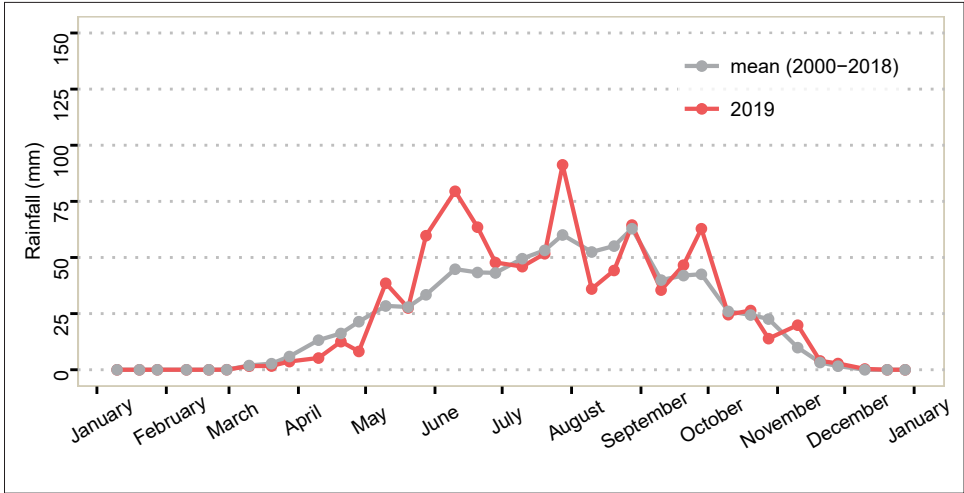Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

This map displays the approximate extent of flooding in the assessed area, obtained through two sources: participatory mapping and remote sensing[3]. The blue areas on the map are the result of remote sensing: light blue represents all areas covered by water in November 2019 while the dark blue shows detected standing water that was present in November, but absent in February (during the dry season) and thereby indicates areas which were likely flooded.

The flooded areas drawn through participatory mapping reflect the situation as perceived by local community members in July-October, 2019. Both methodologies have drawbacks, so this map allows for triangulation and aims to show the most complete picture possible.

Introduction

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• Micro displacement to highlands because flooding has limited access to locations was reported, with a large portion of the county being inaccessible until December.

Nyirol County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations	December 2019:	**INT Risk Level**[1]	**High**	IPC FSL Projection (Sept - Dec):	**3**	IPC Nutrition Projection (Sept - Dec):	**4**

Affected Populations

Individuals affected: 25,001-50,000
The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**High**
August 2019:	**INT Risk Level**	**Very High**

IPC FSL Projection (Sept - Dec):	**3**
IPC FSL:	**4**

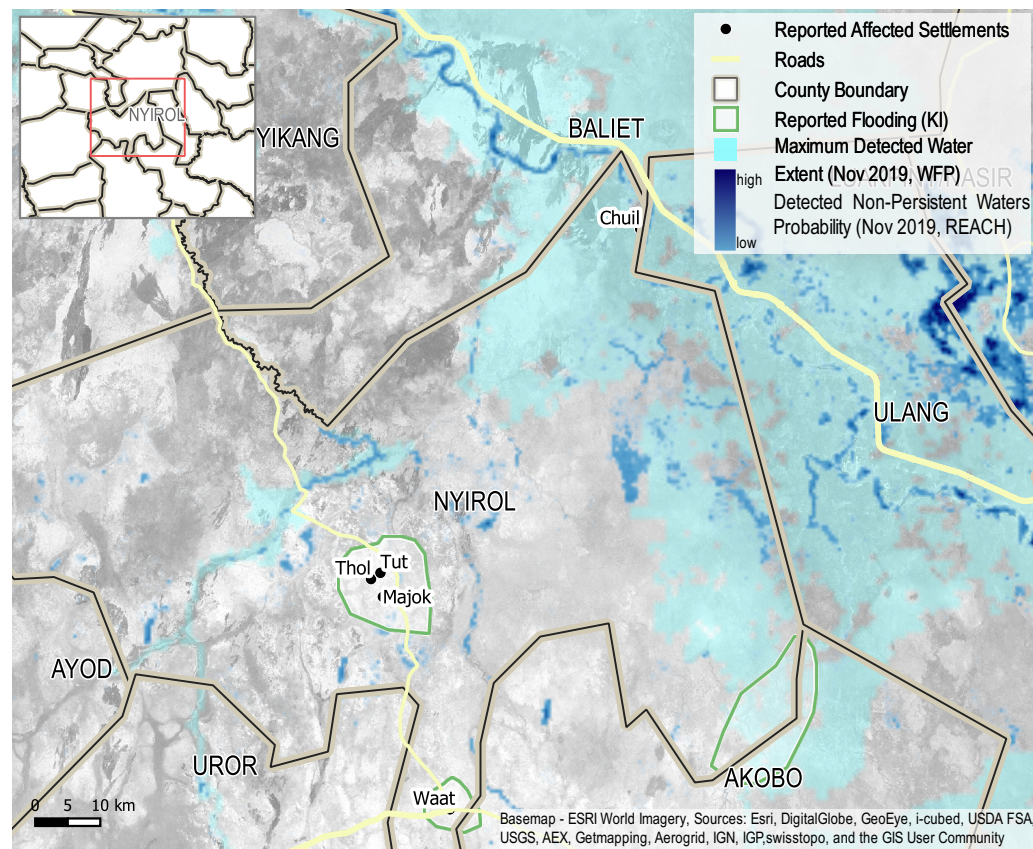|	
IPC Nutrition Projection (Sept - Dec):	**4**
IPC Nutrition:	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) (high / low)

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community
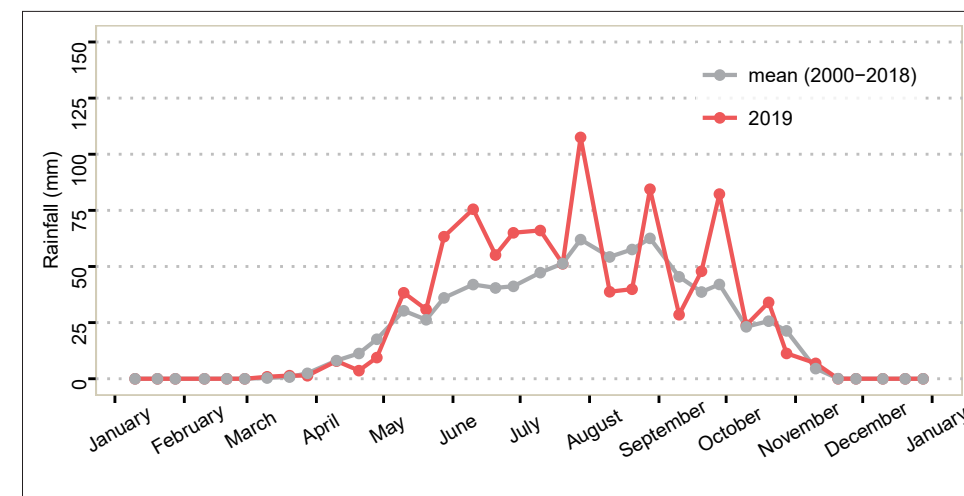
This map displays the approximate extent of flooding in the assessed area, obtained through two sources: participatory mapping and remote sensing[3]. The blue areas on the map are the result of remote sensing: light blue represents all areas covered by water in November 2019 while the dark blue shows detected standing water that was present in November, but absent in February (during the dry season) and thereby indicates areas which were likely flooded.

The flooded areas drawn through participatory mapping reflect the situation as perceived by local community members in July-October, 2019. Both methodologies have drawbacks, so this map allows for triangulation and aims to show the most complete picture possible.

Introduction

In 2019, unprecedented flooding reportedly washed away crops, destroyed homes, and contaminated water sources, as well as restricted access to critical basic services in parts of the country. In October 2019 , REACH produced factsheets to support the prioritisation of flood-affected counties based on underlying vulnerabilities and expected impact on emergency needs. To guide the IPC analysis teams, REACH updated the October 2019 factsheets with new information obtained from additional KI interviews and remote sensing from November 2019, to better understand the current and potential future impact on food security.

Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• The county was predicted to move from IPC Phase 4 (Emergency) to Phase 3 (Crisis) 70% or worse in the period of September to December 2019, but a reduction in crop production and limited access to livestock are likely to have limited the seasonal increase in food security.

• The Food Price Index (JMMI)[1] in Yuai increased substantially in November, by 35% compared to August 2019. The Food Price Index remained at similar levels in December, reinforcing findings that supply route and market constraints linked to flooding remain high.

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.
2. Early Warning Signs: https://earlywarning.usgs.gov/fews/ewx/index.html?region=af as of January 2020
3.The approach employed by REACH analysed Sentinel 1 imagery taken 01- 10 November 2019. Remote sensing may seriously underestimate or overestimate the presence of standing floodwater due to backscattering of the radar signal and smoothing of pixels. This is a preliminary analysis and the results have not been validated in the field. Please send feedback to REACH.
4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Twic East County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations

🏠 **Individuals affected:** 25,001-50,000

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level[1]**	**Very High**
August 2019:	**INT Risk Level**	**Very High**

🍲 **IPC FSL Projection** (Sept - Dec): **3**
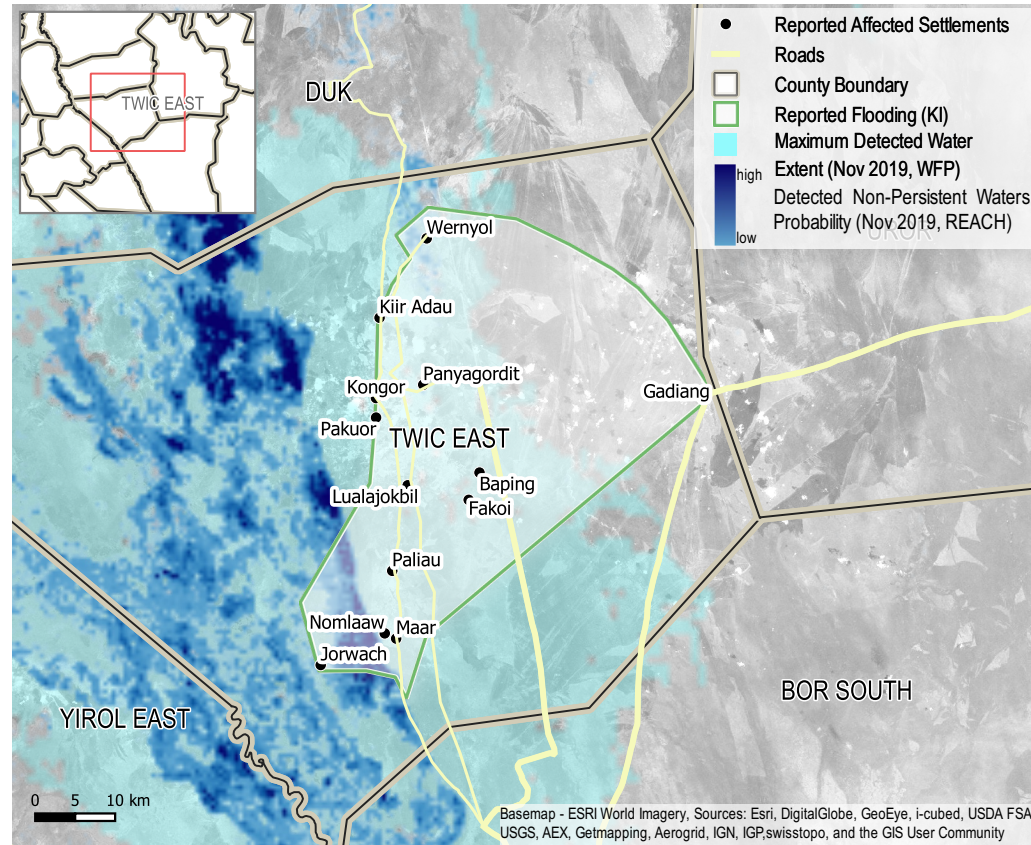
🍲 **IPC FSL:** **3**

😶 **IPC Nutrition Projection** (Sept - Dec): **4**

😶 **IPC Nutrition:** **4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) high–low

Locations on map: DUK, Wernyol, Kiir Adau, Panyagordit, Kongor, Pakuor, TWIC EAST, Gadiang, Baping, Fakoi, Lualajokbil, Paliau, Nomlaaw, Maar, Jorwach, YIROL EAST, BOR SOUTH

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community
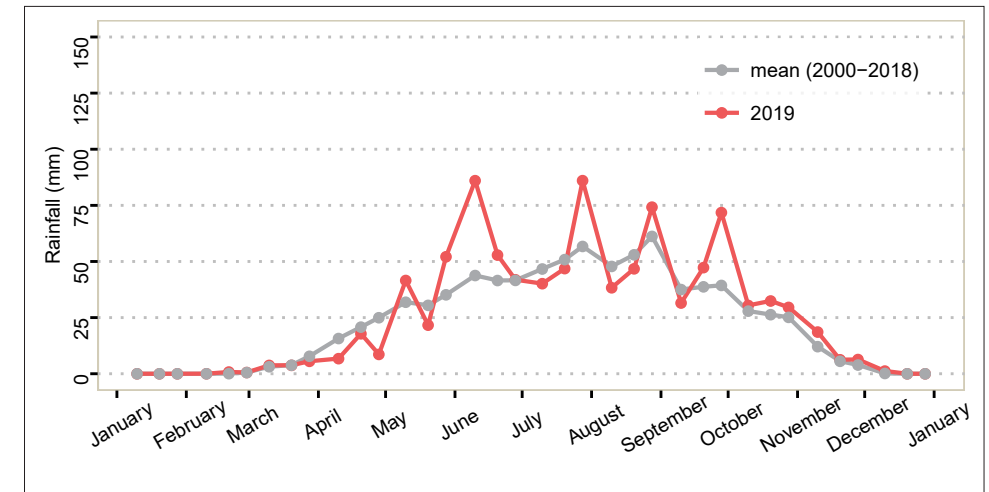
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Introduction

In 2019, unprecedented flooding reportedly washed away crops, destroyed homes, and contaminated water sources, as well as restricted access to critical basic services in parts of the country. In October 2019 , REACH produced factsheets to support the prioritisation of flood-affected counties based on underlying vulnerabilities and expected impact on emergency needs. To guide the IPC analysis teams, REACH updated the October 2019 factsheets with new information obtained from additional KI interviews and remote sensing from November 2019, to better understand the current and potential future impact on food security.

Average County Rainfall[2]

Legend: mean (2000–2018), 2019

Impact of Flooding (as reported by KIs)

• Flooding may exacerbate the already widespread food insecurity (IPC Phase 3: Crisis) in Twic East, especially as crops have been submerged and likely damaged prior to harvest

• WASH needs have been historically high along the Nile in Jonglei, making the area vulnerable to waterborne diseases such as cholera and typhoid, which when coupled with poor access to healthcare may lead to disease outbreak, and long-term increases in malnutrition in the area.

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.

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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Uror County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations

🏘️ **Individuals affected:** 25,001-50,000

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**High**
August 2019:	**INT Risk Level**	**High**

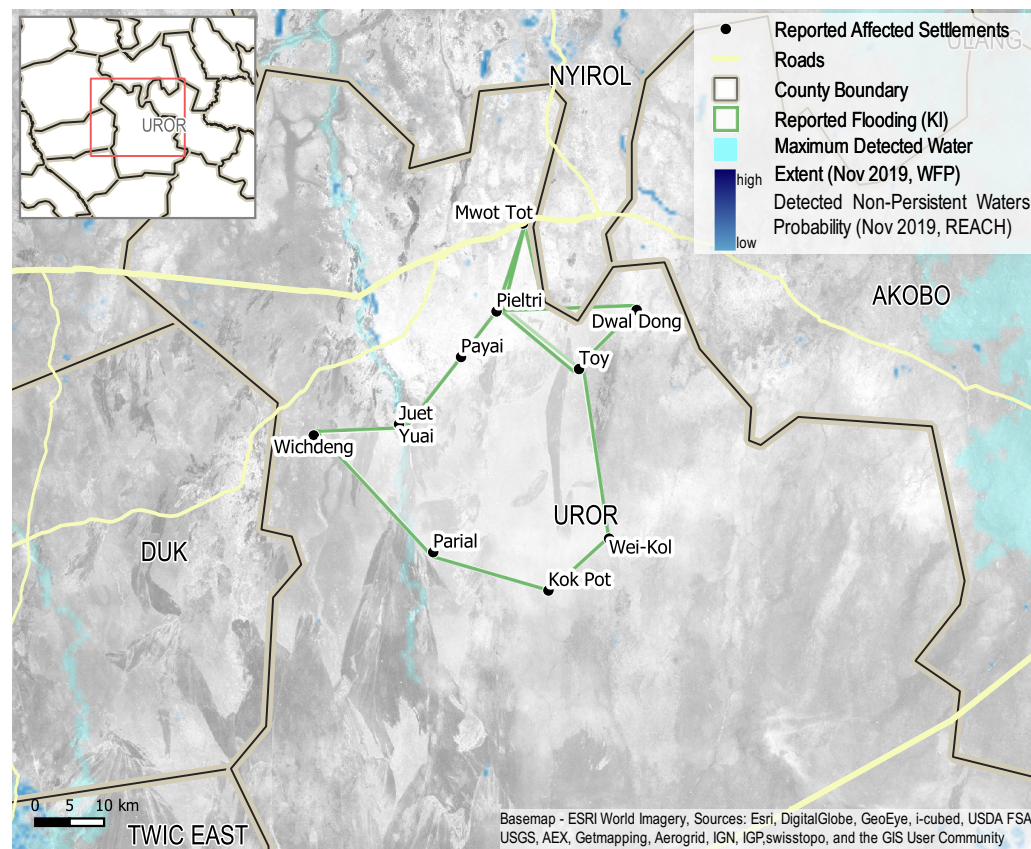|	
🍲 **IPC FSL Projection** (Sept - Dec):	**3**
🍲 **IPC FSL:**	**3**

😰 **IPC Nutrition Projection** (Sept - Dec):	**4**
😰 **IPC Nutrition:**	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community

Legend:
- Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
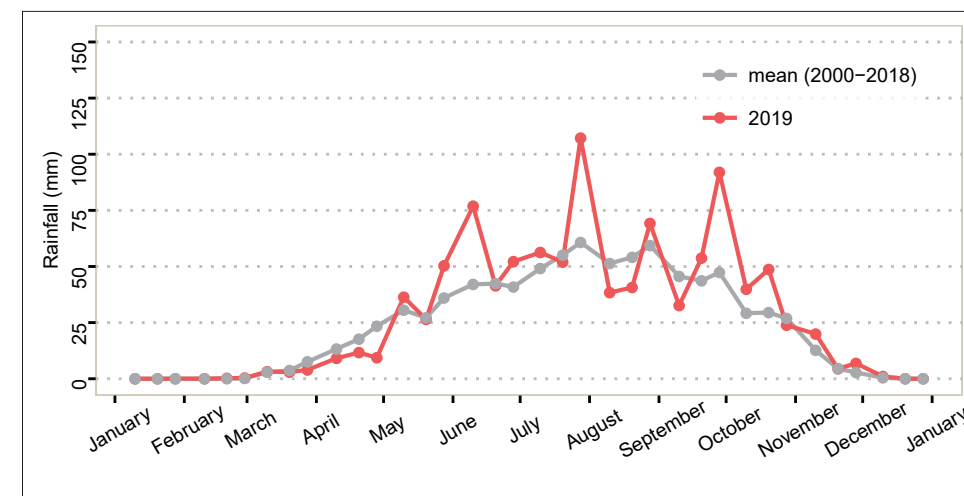- Detected Non-Persistent Waters Probability (Nov 2019, REACH) high/low

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Introduction

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• The county was predicted to move from IPC Phase 4 (Emergency) to Phase 3 (Crisis) between September - December 2019, however, the degree with flooding may impact IPC projections is uncertain – but likely to have lasting impacts on projection 1 (September – December 2019) and projection 2 (January to April 2020).

• There is currently no full data on the extent the flood may have impacted crop yields. However, general reports from FAO suggest pre-harvest flooding has likely led to reduced food stocks that will be depleted earlier into the lean season, forcing populations to employ negative coping strategies even earlier than normal.

• Possibility of increased migration to Gambella (Ethiopia) to access services or to cattle camps to access livestock products. Further, micro-displacement is likely to have disrupted post-harvest livelihoods.

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.

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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Luakpiny/Nasir County Profile - Flooding Response
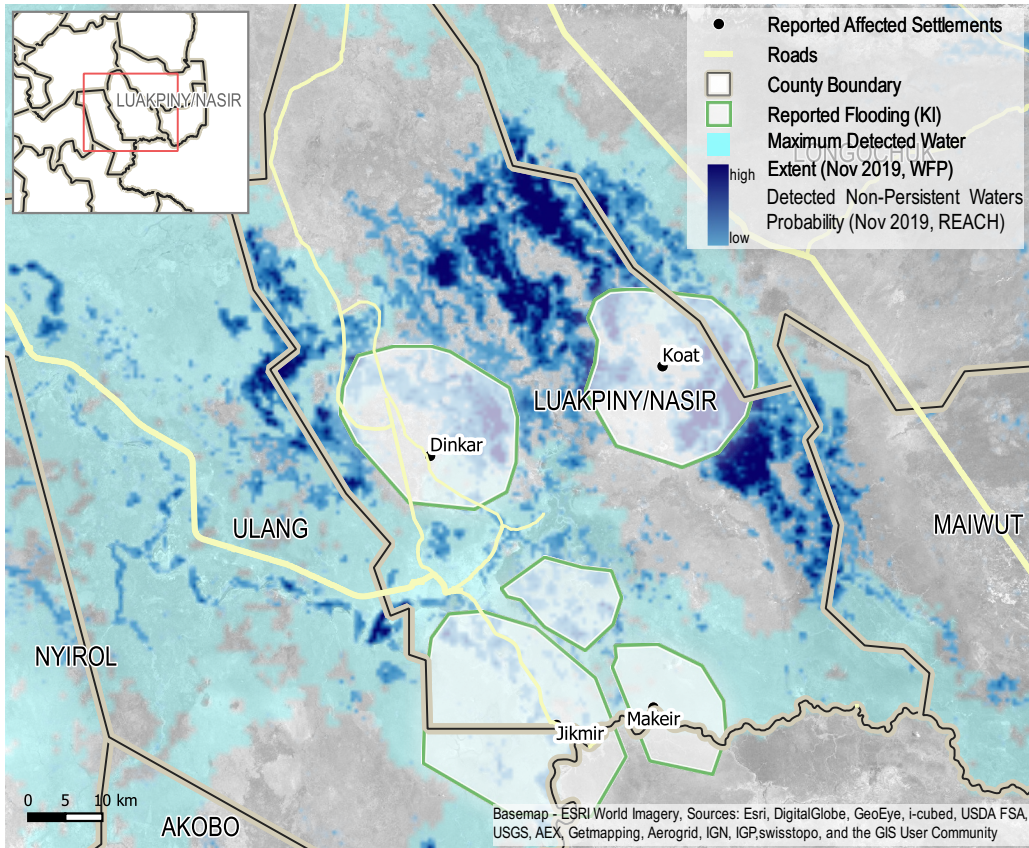## Upper Nile State, South Sudan - January 2020

Affected Populations

🏠 **Individuals affected:** 25,001-50,000

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**Very High**
August 2019:	**INT Risk Level**	**Very High**

🍲 **IPC FSL Projection** (Sept - Dec):	**3**
🍚 **IPC FSL:**	**3**

😣 **IPC Nutrition Projection** (Sept - Dec):	**4**
😣 **IPC Nutrition:**	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) (high – low)

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community
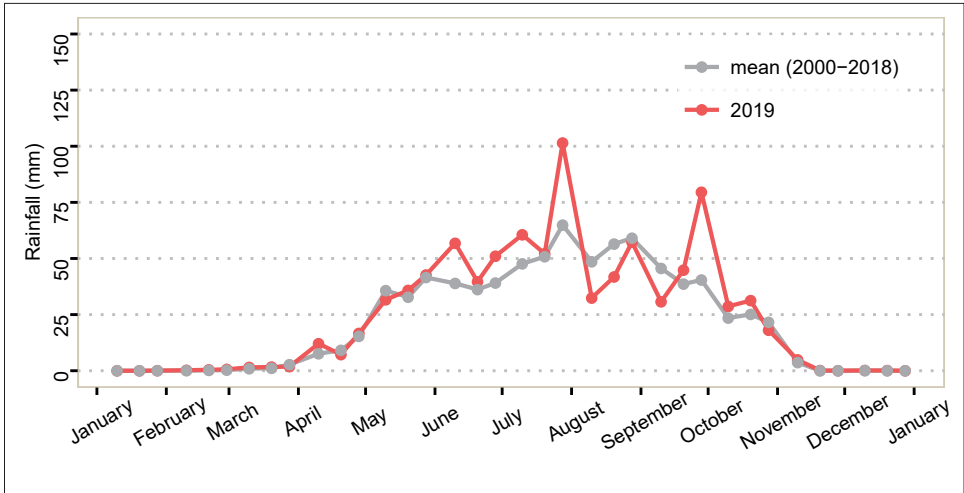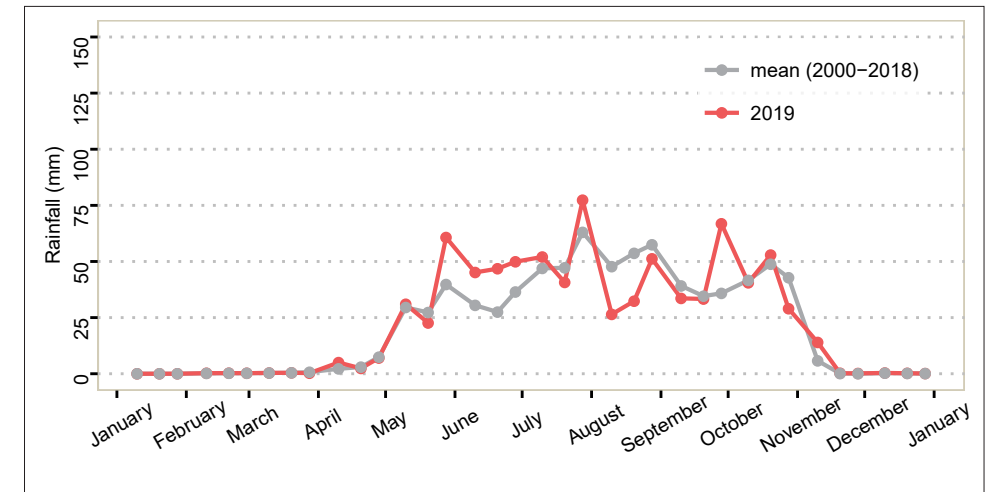
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Introduction

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• With livelihoods largely reliant on livestock rearing and to a lesser extent fishing, flooding has reportedly destroyed critical livelihood assets such as livestock, which are dying or falling ill, as well as fishing equipment

• Continuously rising water levels have reportedly destroyed shelters, displaced people to higher grounds, and led to a loss of NFIs

• Coping strategies such as relocating to towns with functional markets to sell existing livestock are reportedly becoming more common in the immediate aftermath of the floods. Sale of livestock is notably the most important source of cash in the region and as such is likely to have long-term negative repercussions on the livelihoods of the area

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.

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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Maban County Profile - Flooding Response
Upper Nile State, South Sudan - January 2020

Affected Populations

🏠 **Individuals affected:** 100,000+

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	INT Risk Level[1]	**High**
August 2019:	INT Risk Level	**Very High**

🍲 IPC FSL Projection (Sept - Dec): **3**

🍚 IPC FSL: **3**

😟 IPC Nutrition Projection (Sept - Dec): **3**

😟 IPC Nutrition: **3**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) — high / low

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• According to UNHCR, around 150,000 refugees and over 70,000 members of the host community were affected by the recent flooding, which has been unprecedented this season

• The only road connecting Bunj and Melut town was submerged contributing to scarcity of goods in the market and a subsequent significant increase of prices of food and goods

• According to an assessment completed by DRC and UNHCR in Doro Camp in Maban, 80% of shelters have been damaged and there has been a 70% increase in food prices in the markets. Coping mechanisms include eating fewer meals a day and eating more wild foods than usual

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.

2. Early Warning Signs: https://earlywarning.usgs.gov/fews/ewx/index.html?region=af as of January 2020

3.The approach employed by REACH analysed Sentinel 1 imagery taken 01- 10 November 2019. Remote sensing may seriously underestimate or overestimate the presence of standing floodwater due to backscattering of the radar signal and smoothing of pixels. This is a preliminary analysis and the results have not been validated in the field. Please send feedback to REACH.

4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Rumbek North County Profile - Flooding Response
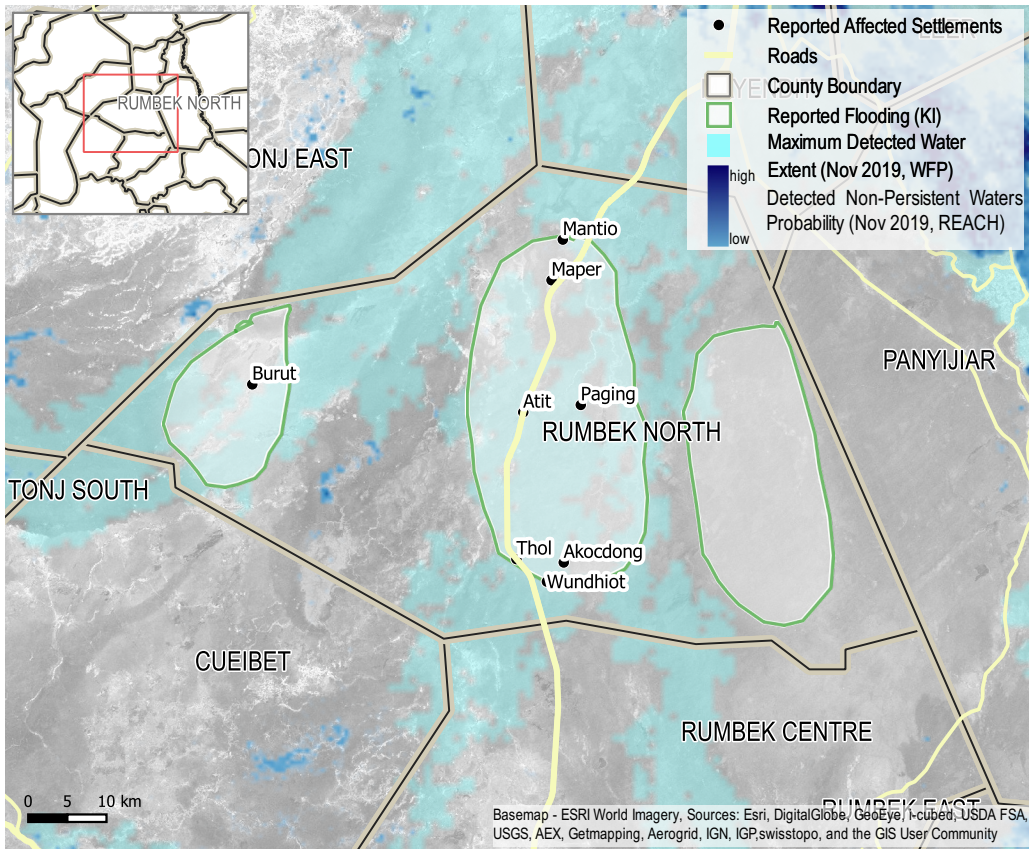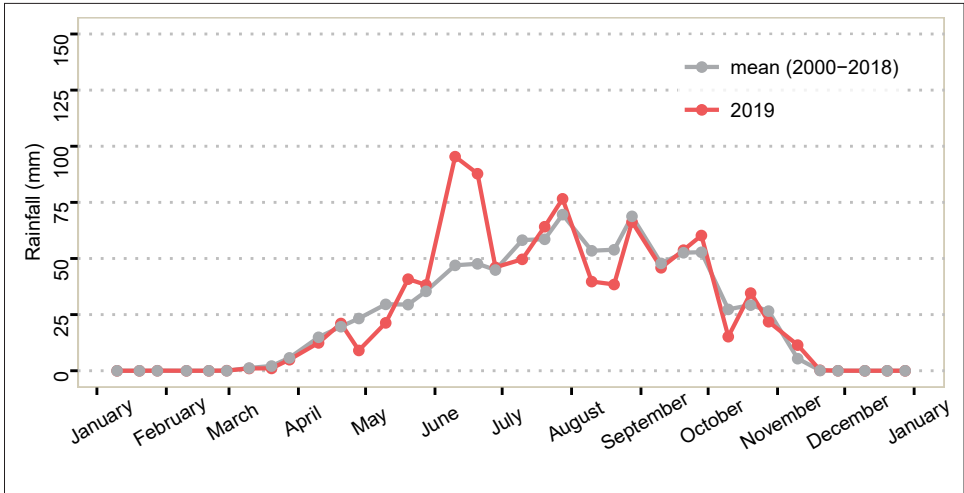## Lakes State, South Sudan - January 2020

Affected Populations

Individuals affected: 25,001-50,000
The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**Very High**
August 2019:	**INT Risk Level**	**Very High**

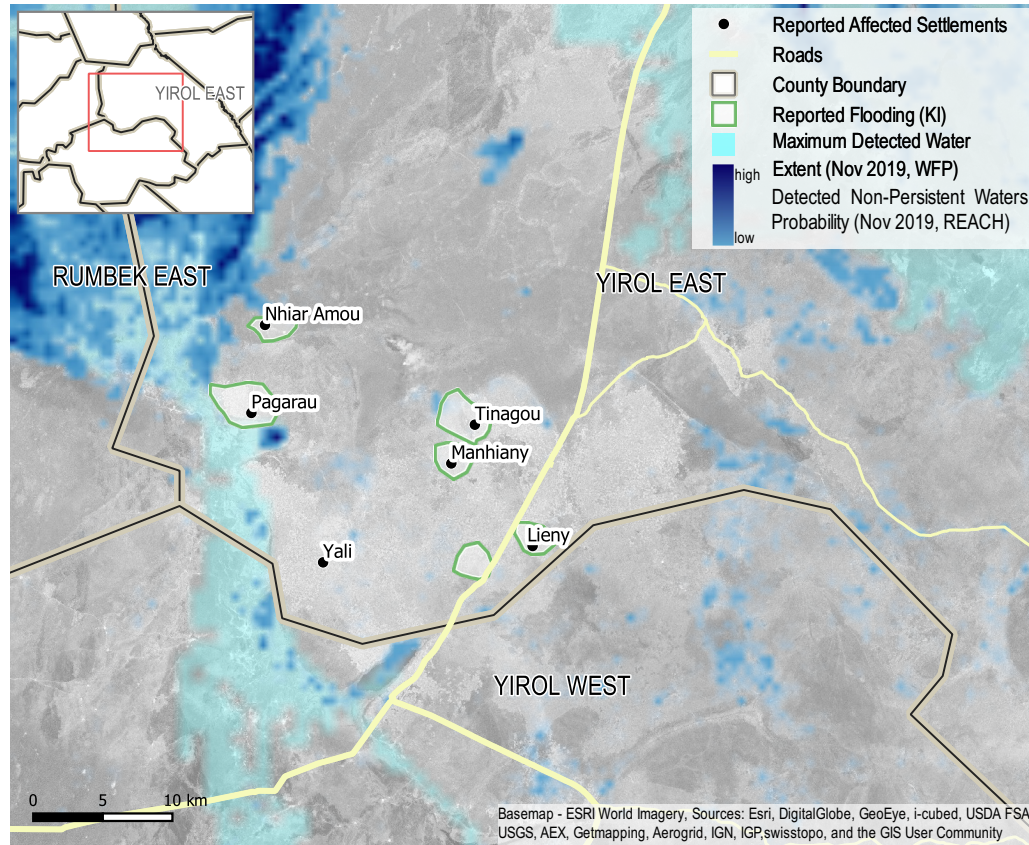|	
IPC FSL Projection (Sept - Dec):	**3**
IPC FSL:	**3**

IPC Nutrition Projection (Sept - Dec):	**3**
IPC Nutrition:	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) high / low

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community

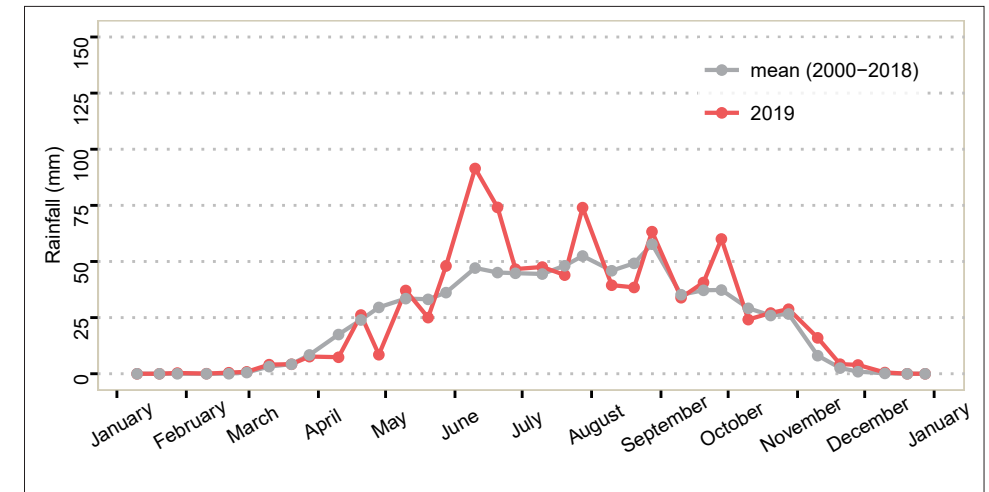This map displays the approximate extent of flooding in the assessed area, obtained through two sources: participatory mapping and remote sensing[3]. The blue areas on the map are the result of remote sensing: light blue represents all areas covered by water in November 2019 while the dark blue shows detected standing water that was present in November, but absent in February (during the dry season) and thereby indicates areas which were likely flooded.

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

Endnotes

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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Yirol East County Profile - Flooding Response
Lakes State, South Sudan - January 2020

Affected Populations

🏠 **Individuals affected:** No Info

December 2019:	**INT Risk Level**[1]	**Confirmed**
August 2019:	**INT Risk Level**	**Very High**

🍲 **IPC FSL Projection** (Sept - Dec): **3**

🍲 **IPC FSL:** **3**

😷 **IPC Nutrition Projection** (Sept - Dec): **2**

😷 **IPC Nutrition:** **2**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- ─ Roads
- ☐ County Boundary
- ☐ Reported Flooding (KI)
- ☐ Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) (high to low)

RUMBEK EAST

YIROL EAST

Nhiar Amou

Pagarau

Tinagou

Manhiany

Yali

Lieny

YIROL WEST

0 5 10 km

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community

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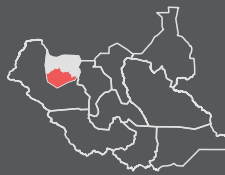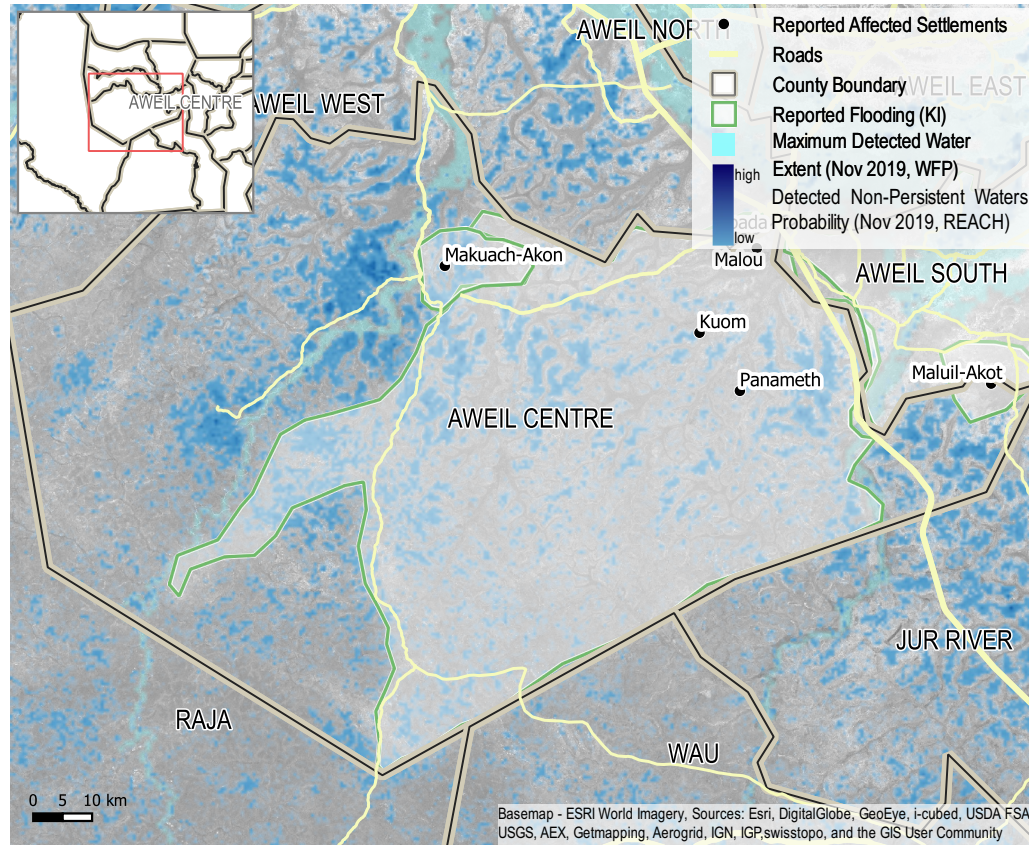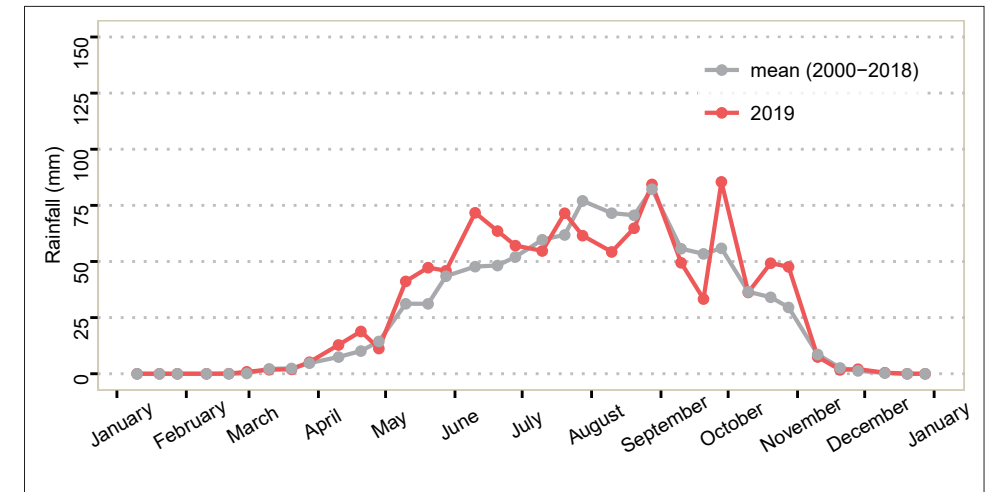
Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

Aweil Centre County Profile - Flooding Response
Northern Bahr el Ghazal State, South Sudan - January 2020

Affected Populations	December 2019:	**INT Risk Level**[1]	**Very High**	**IPC FSL Projection** (Sept - Dec):	**3**	**IPC Nutrition Projection** (Sept - Dec):	**3**

Affected Populations

Individuals affected: 25,001-50,000
The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**Very High**
August 2019:	**INT Risk Level**	**Very High**

IPC FSL Projection (Sept - Dec):	**3**
IPC FSL:	**3**

IPC Nutrition Projection (Sept - Dec):	**3**
IPC Nutrition:	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) (high to low)

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• In 2019, delays in rainfall up to early July delayed cultivation in Barmayen, Bau, and Aroyo.

• Heavy rain in late July washed seeds away. As a result, there has reportedly been very little cultivation.

• According to focus group discussions in November and December 2019, there are very significant gaps in access to goods and services.

• Morbidity associated with malaria and diarrhoea will likely increase due to an expansion of breeding grounds for vector-borne diseases and an increase in the concentration of contaminated water sources. The expected increase in respiratory infections (ARI) during the dry season will be likely be compounded by increased exposure for households with damaged shelters.

Endnotes
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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Aweil East County Profile - Flooding Response
Northern Bahr el Ghazal State, South Sudan - January 2020

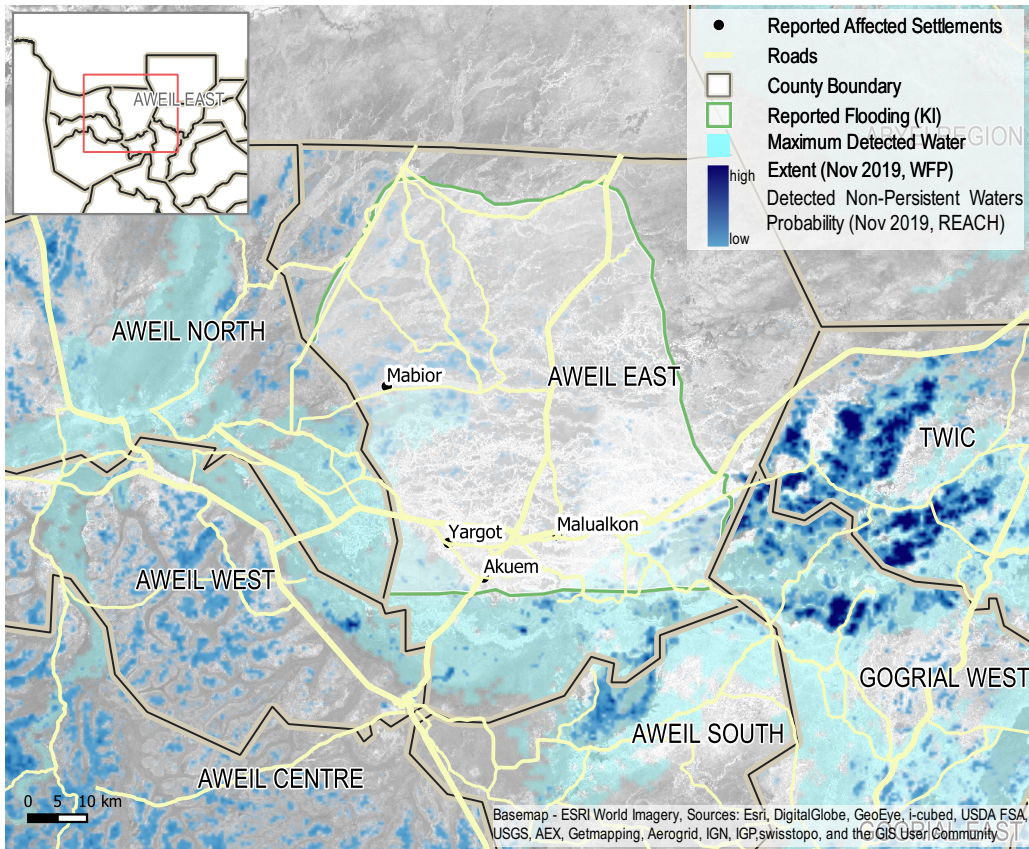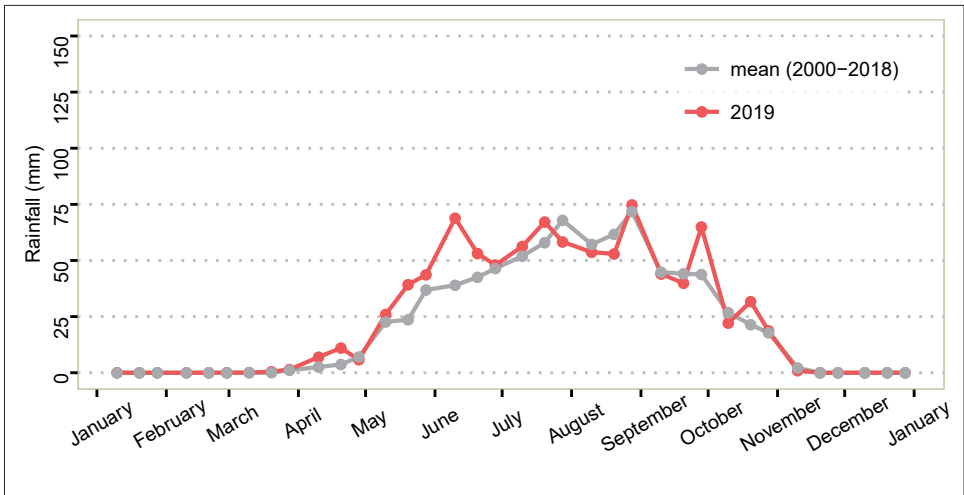**Affected Populations**

🏚️ **Individuals affected:** No Info

December 2019:	**INT Risk Level**[1]	**Very High**
August 2019:	**INT Risk Level**	**Very High**

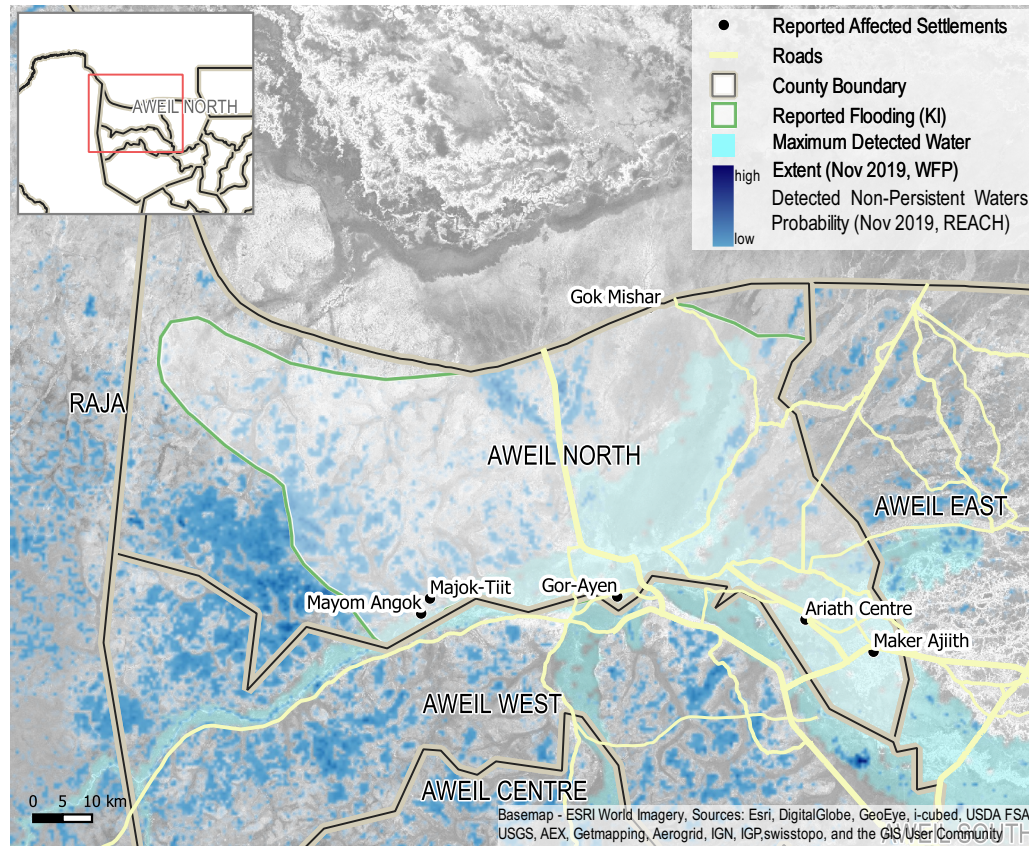|	
🍚 **IPC FSL Projection** (Sept - Dec):	**3**
🍚 **IPC FSL:**	**4**

👥 **IPC Nutrition Projection** (Sept - Dec):	**3**
👥 **IPC Nutrition:**	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) — high / low

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• Since the water has receded, populations are returning back to Aweil East though houses are reportedly still severely damaged.

• A key information gap in the response that remains is the scope of needs and estimates of the populations facing these needs, due to the reported high level of movement and inability for humanitarian actors to access many of these locations.

Affected Populations

Individuals affected: 5,000-25,000

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**High**
August 2019:	**INT Risk Level**	**Very High**

IPC FSL Projection (Sept - Dec):	**3**
IPC FSL:	**4**

IPC Nutrition Projection (Sept - Dec):	**3**
IPC Nutrition:	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

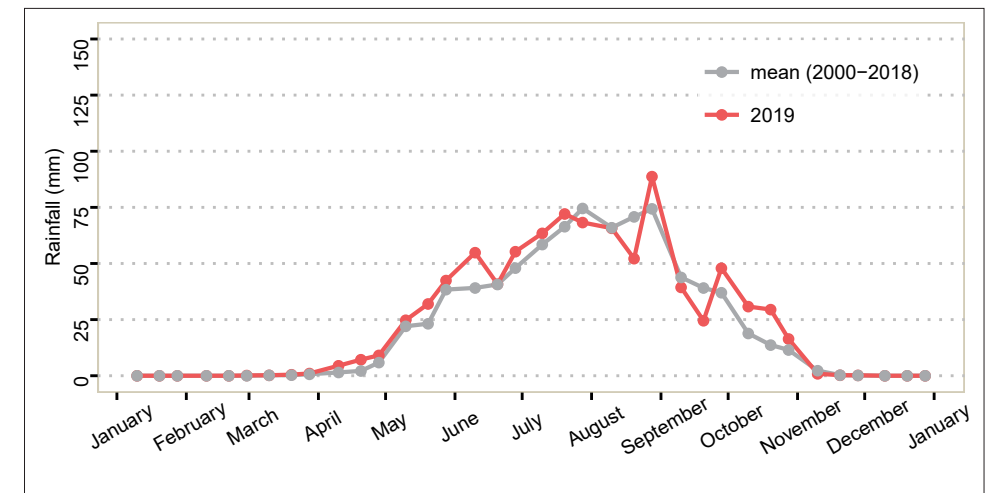This map displays the approximate extent of flooding in the assessed area, obtained through two sources: participatory mapping and remote sensing[3]. The blue areas on the map are the result of remote sensing: light blue represents all areas covered by water in November 2019 while the dark blue shows detected standing water that was present in November, but absent in February (during the dry season) and thereby indicates areas which were likely flooded.

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• Flooding has reportedly damaged houses as well as crops; according to focus group members, some are completely submerged.

• Due to severe shelter damage, there is increased population movement from Aweil North to Sudan.

• Morbidity associated with malaria and diarrhoea will likely increase due to an expansion of breeding grounds for vector-borne diseases and an increase in the concentration of contaminated water sources. The expected increase in respiratory infections (ARI) during the dry season will be likely be compounded by increased exposure for households with damaged shelters.

Endnotes

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Gogrial West County Profile - Flooding Response
Warrap State, South Sudan - January 2020
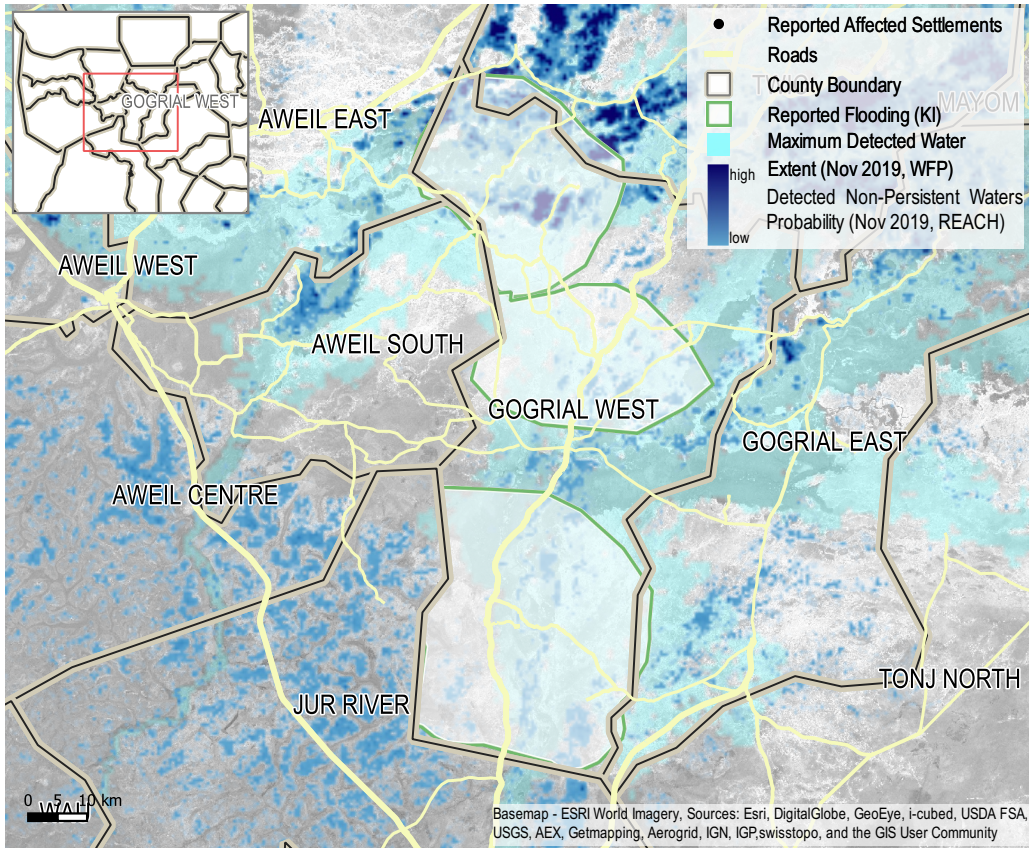
Affected Populations

 Individuals affected: 5,000-25,000

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

| December 2019: | INT Risk Level[1] | Very High |
| August 2019: | INT Risk Level | High |

| | IPC FSL Projection (Sept - Dec): | 3 |
| | IPC FSL: | 3 |

| | IPC Nutrition Projection (Sept - Dec): | 4 |
| | IPC Nutrition: | 4 |

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
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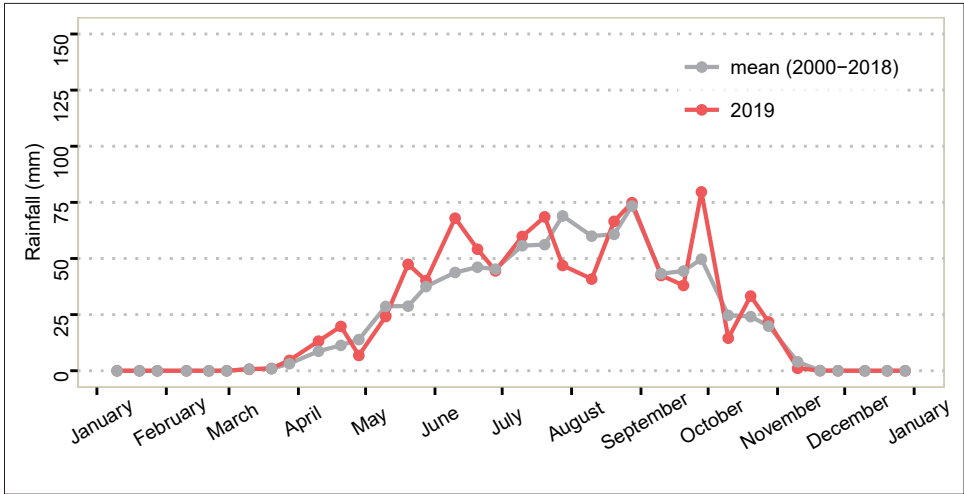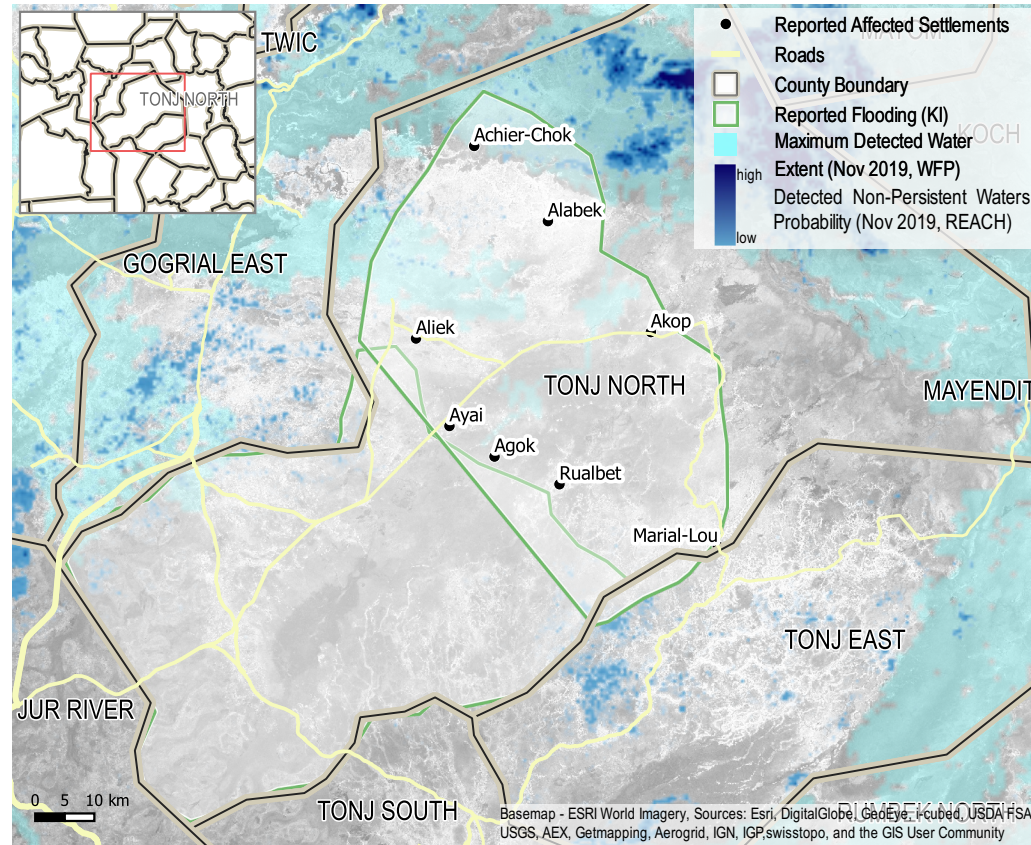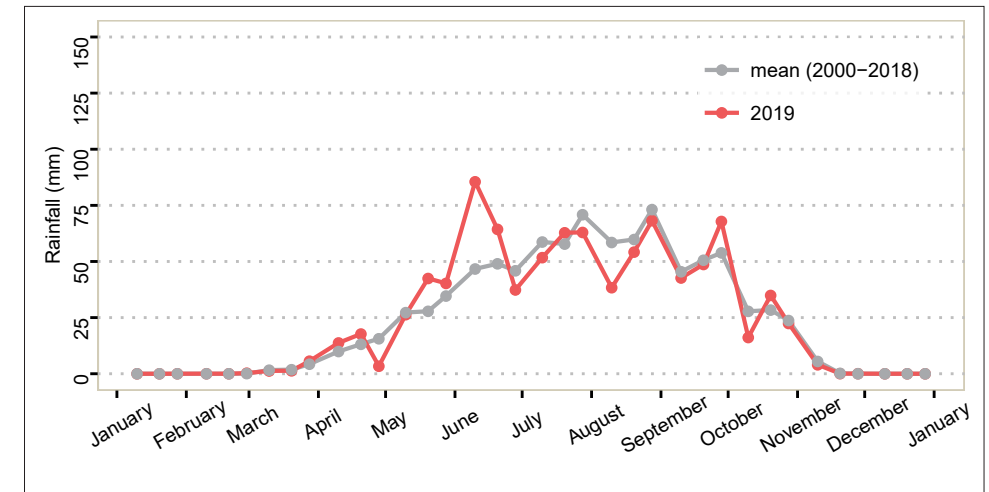
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Tonj North County Profile - Flooding Response
Warrap State, South Sudan - January 2020

Affected Populations

Individuals affected: 5,000-25,000
The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	**Moderate**
August 2019:	**INT Risk Level**	**High**

IPC FSL Projection (Sept - Dec):	**3**
IPC FSL:	**4**

IPC Nutrition Projection (Sept - Dec):	**2**
IPC Nutrition:	**3**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community

Legend:
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- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) high / low

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

- Intercommunal violence in Tonj North in April 2019 reportedly resulted in movement of people to the Wau PoC as well as to other collective sites in the town.

Endnotes

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Twic County Profile - Flooding Response
Warrap State, South Sudan - January 2020

Affected Populations

Individuals affected: 25,001-50,000
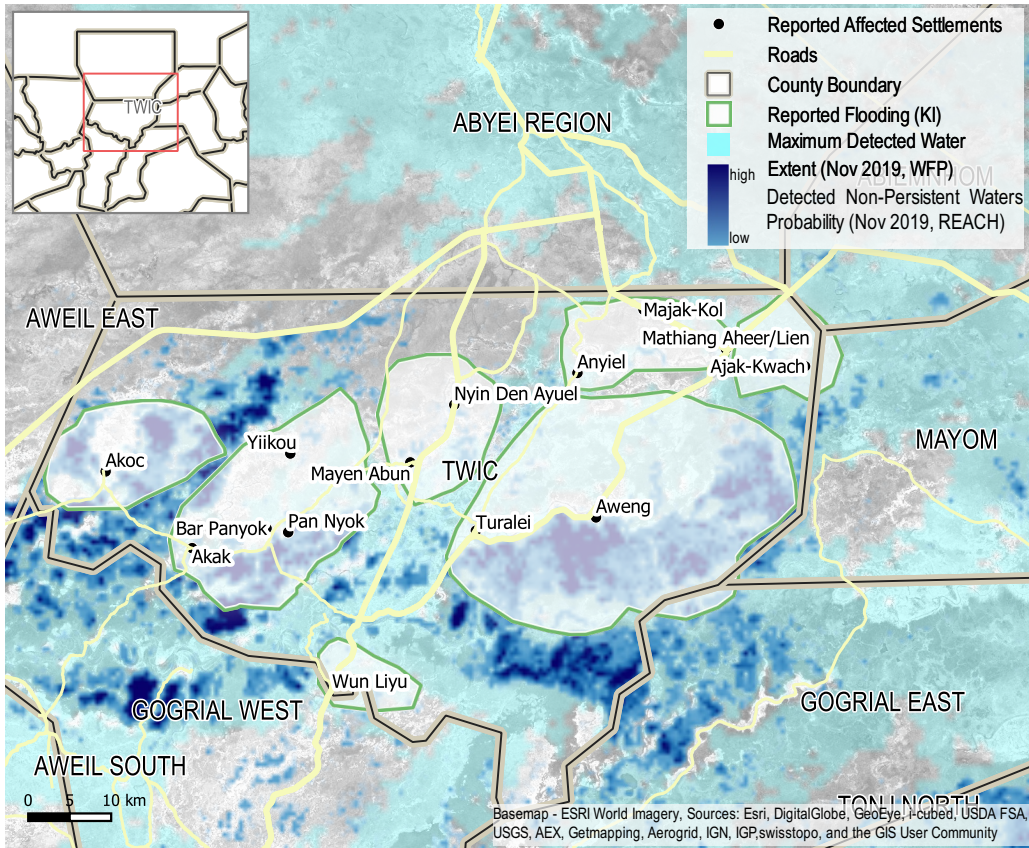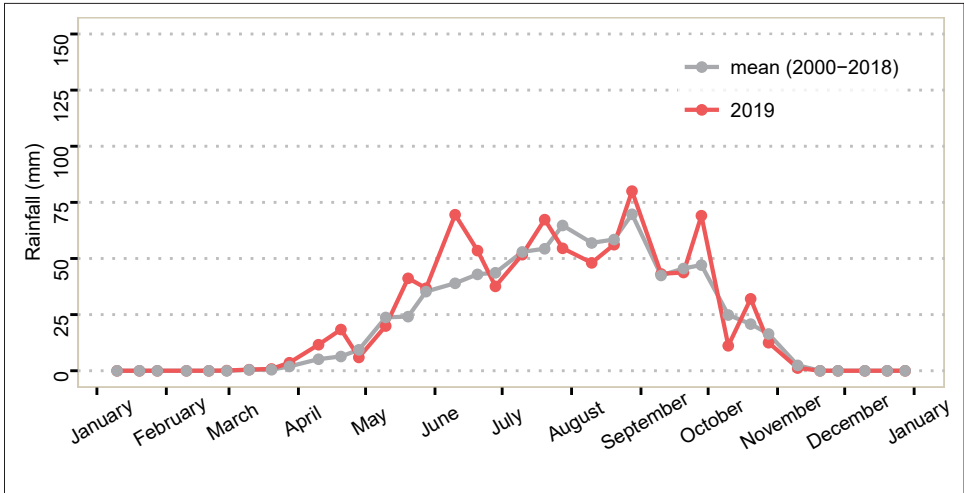The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	**INT Risk Level**[1]	Very High	**IPC FSL Projection** (Sept - Dec):	3	**IPC Nutrition Projection** (Sept - Dec):	4
August 2019:	**INT Risk Level**	High	**IPC FSL:**	3	**IPC Nutrition:**	4

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• Intercommunal violence and flooding has continued to disrupt livelihoods. This area needs to be watched for any changes as GAM (global acute malnutrition) prevalence is always above a critical level.

Ayod County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations	**December 2019:** **INT Risk Level**[1] **High**	**IPC FSL Projection** (Sept - Dec): **3**	**IPC Nutrition Projection** (Sept - Dec): **4**
Individuals affected: 5,000-25,000	**August 2019:** **INT Risk Level** **Very High**	**IPC FSL:** **3**	**IPC Nutrition:** **4**

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- — Roads
- ☐ County Boundary
- ☐ Reported Flooding (KI)
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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• The implications of flooding in Ayod county are likely to be a major driver of needs in the county. The last major flooding, October 2016, was commonly referred to by KIs and HHs as the major driver of severe levels of acute food insecurity in June 2017. The lasting impact of flooding on a vulnerable population are likely to manifest for the medium term.

• Key market routes are reportedly limited or unavailable as a result of the flooding and likely have had impact on prices– although exact price data is currently unavailable.

• WASH needs have been historically high along the Nile in Jonglei, making the area vulnerable to waterborne diseases such as cholera and typhoid as water sources may have been contaminated by flood water.

Endnotes

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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Pibor County Profile - Flooding Response
Jonglei State, South Sudan - January 2020

Affected Populations

🏚 **Individuals affected:** 100,000+

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

| December 2019: | **INT Risk Level**[1] | **High** |
| August 2019: | **INT Risk Level** | **Very High** |

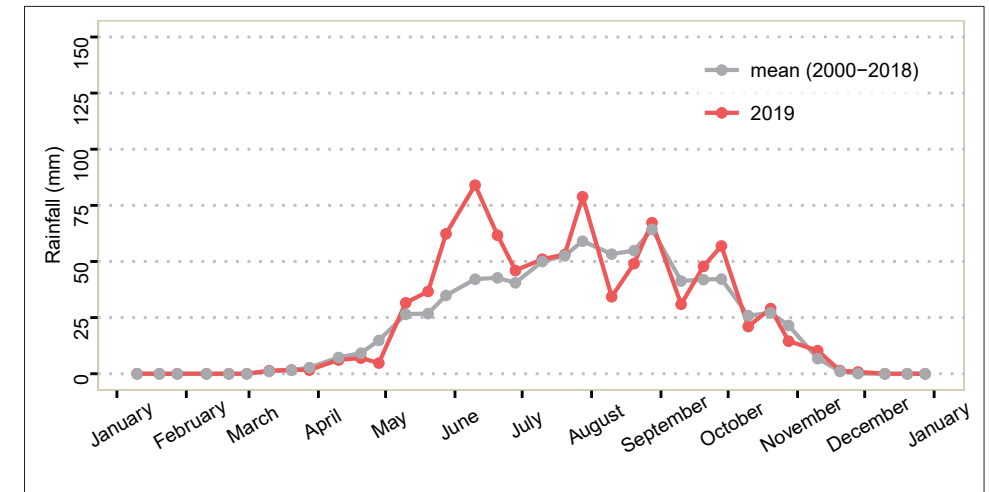| 🍲 | **IPC FSL Projection** (Sept - Dec): | **3** |
| 🍚 | **IPC FSL:** | **4** |

| 😣 | **IPC Nutrition Projection** (Sept - Dec): | **4** |
| 😣 | **IPC Nutrition:** | **3** |

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- ● Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) high—low

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community
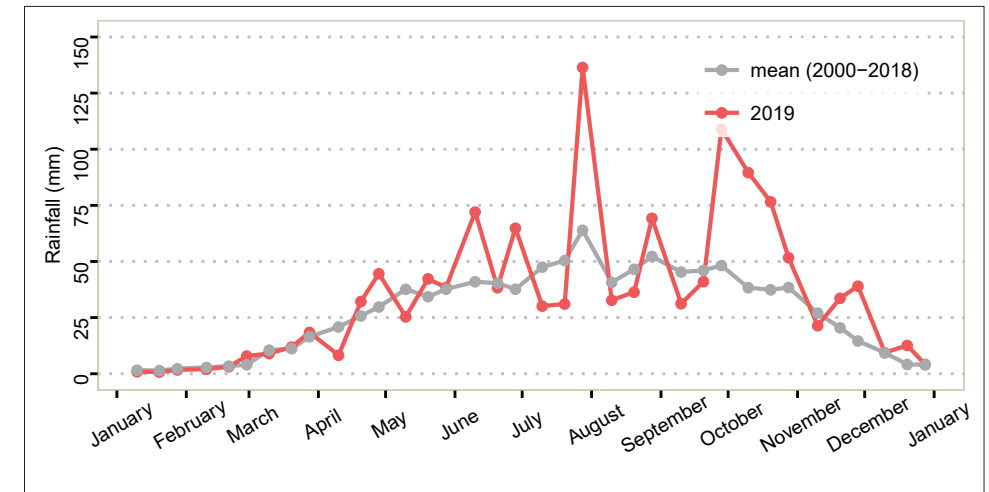
This map displays the approximate extent of flooding in the assessed area, obtained through two sources: participatory mapping and remote sensing[3]. The blue areas on the map are the result of remote sensing: light blue represents all areas covered by water in November 2019 while the dark blue shows detected standing water that was present in November, but absent in February (during the dry season) and thereby indicates areas which were likely flooded.

The flooded areas drawn through participatory mapping reflect the situation as perceived by local community members in July-October, 2019. Both methodologies have drawbacks, so this map allows for triangulation and aims to show the most complete picture possible.

Introduction

In 2019, unprecedented flooding reportedly washed away crops, destroyed homes, and contaminated water sources, as well as restricted access to critical basic services in parts of the country. In October 2019 , REACH produced factsheets to support the prioritisation of flood-affected counties based on underlying vulnerabilities and expected impact on emergency needs. To guide the IPC analysis teams, REACH updated the October 2019 factsheets with new information obtained from additional KI interviews and remote sensing from November 2019, to better understand the current and potential future impact on food security.

Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• Flooding will likely exacerbate food insecurity in the coming dry season due limited food availability and accessibility, lost livestock and assets, market price fluctuations, increased morbidity, and an extended period of limited access to services due to the presence of flood waters.

• Morbidity associated with malaria and diarrhoea will likely increase due to an expansion of breeding grounds for vector-borne diseases and an increase in the concentration of contaminated water sources. The expected increase in respiratory infections (ARI) during the dry season will be likely be compounded by increased exposure for households with damaged shelters.

Endnotes

1. The INT Risk Category is based on multiple sources of data in four categories: Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), Health, and Nutrition. This data is fed through an analytical framework to provide an indication of the level of risk that emergency needs are present in a given county. This risk level can then be used in further discussion and triangulation. More information about the Integrated Needs Tracking System (INT) is available here: https://ssd-int.reach-info.org/.
2. Early Warning Signs: https://earlywarning.usgs.gov/fews/ewx/index.html?region=af as of January 2020
3.The approach employed by REACH analysed Sentinel 1 imagery taken 01- 10 November 2019. Remote sensing may seriously underestimate or overestimate the presence of standing floodwater due to backscattering of the radar signal and smoothing of pixels. This is a preliminary analysis and the results have not been validated in the field. Please send feedback to REACH.
4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Mayom County Profile - Flooding Response
Unity State, South Sudan - January 2020

Affected Populations

 Individuals affected: 25,001-50,000

The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	INT Risk Level[1]	**High**
August 2019:	INT Risk Level	**High**

IPC FSL Projection (Sept - Dec):	**3**
IPC FSL:	**3**

IPC Nutrition Projection (Sept - Dec):	**3**
IPC Nutrition:	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Legend:
- Reported Affected Settlements
- Roads
- County Boundary
- Reported Flooding (KI)
- Maximum Detected Water Extent (Nov 2019, WFP)
- Detected Non-Persistent Waters Probability (Nov 2019, REACH) — high / low

Basemap - ESRI World Imagery, Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP,swisstopo, and the GIS User Community
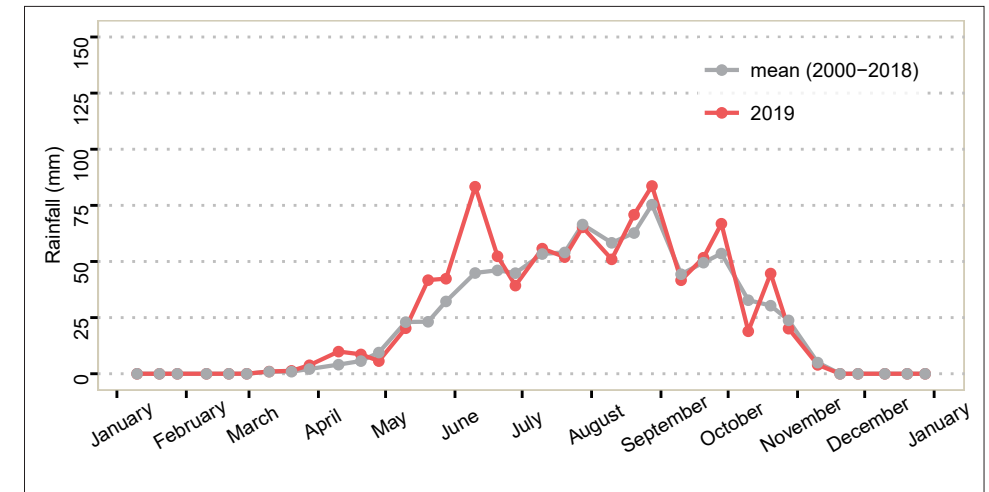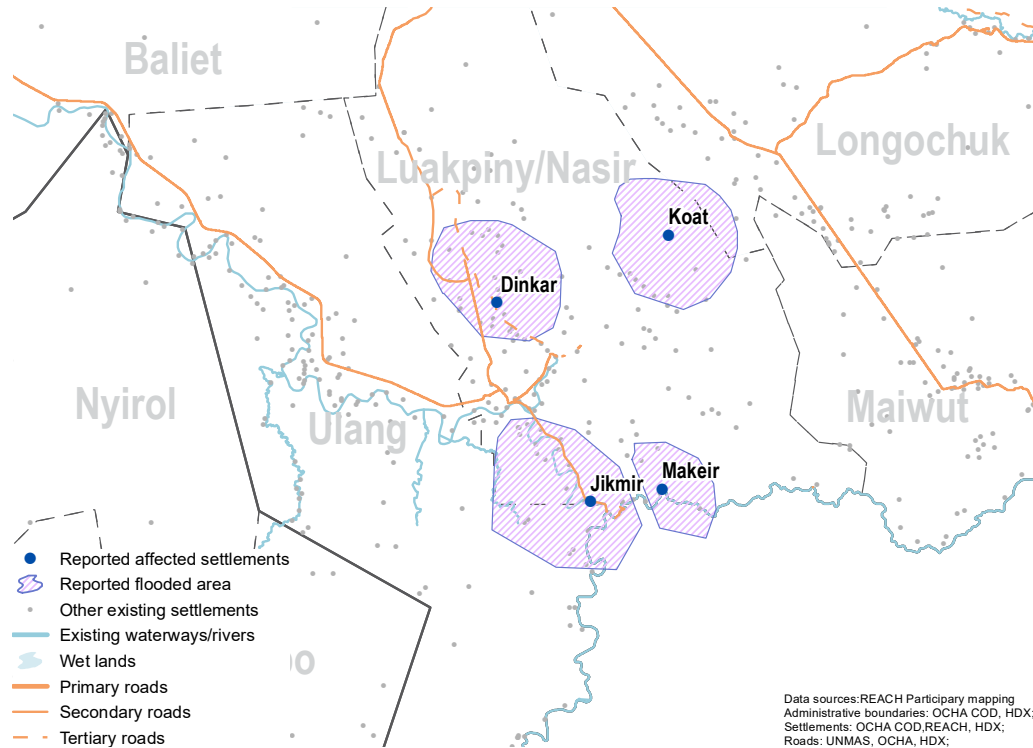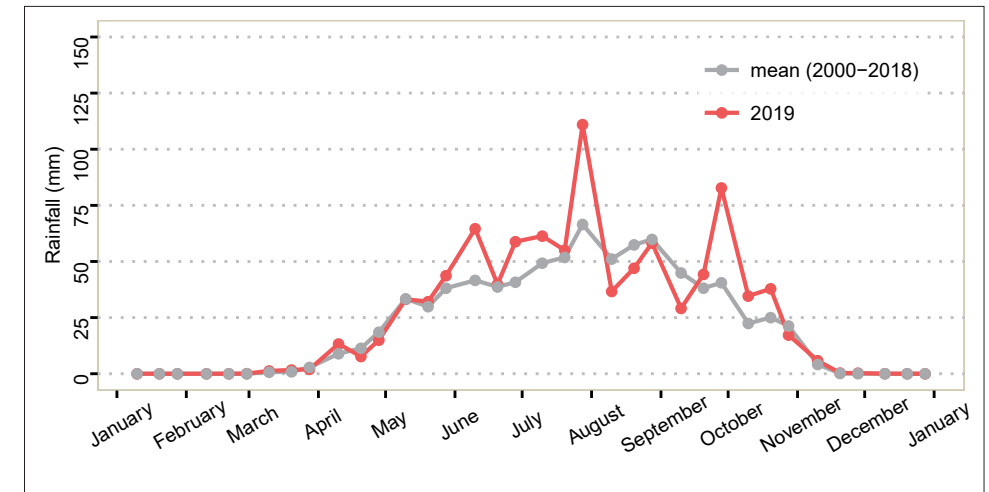
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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)

• Excess rains have caused displacement to surrounding highlands and roadside areas due to flooding. IDPs are reportedly relying on relatives or social networks for shelter and resources.

• Reported destruction of crops by flooding will likely impede access to food in the short and medium term. Reports of increased sales of livestock in the market point towards the use of a coping mechanism.

• Flooding has destroyed waterpoints and local community members are reportedly relying on open water sources such as rivers and swamps, which posess a severe health risk given reports of widespread open defecation practices near rivers. This risk is further exacerbated by the reports that the health and nutrition facilities in the area have been flooded.

• Destruction of fishing kits and other key livelihood assets has limited access to key seasonal food sources.

Endnotes

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4. Joint Market Monitorint Initiative (JMMI), South Sudan, REACH, December, 2019

Ulang County Profile - Flooding Response
Upper Nile State, South Sudan - January 2020

Affected Populations

Individuals affected: 25,001-50,000
The numbers are indicative and have not been verified. Source: OCHA Overview Floods Matrix (Oct/Nov 2019)

December 2019:	INT Risk Level[1]	**High**
August 2019:	INT Risk Level	**Very High**

IPC FSL Projection (Sept - Dec):	**4**
IPC FSL:	**4**

IPC Nutrition Projection (Sept - Dec):	**4**
IPC Nutrition:	**4**

Source: IPC - Integrated Food Security Phase Classification

Flooded Locations

Koat
Dinkar
Jikmir
Makeir

Baliet
Luakpiny/Nasir
Longochuk
Nyirol
Ulang
Maiwut

Legend:
- Reported affected settlements
- Reported flooded area
- Other existing settlements
- Existing waterways/rivers
- Wet lands
- Primary roads
- Secondary roads
- Tertiary roads

Data sources: REACH Participary mapping
Administrative boundaries: OCHA COD, HDX;
Settlements: OCHA COD, REACH, HDX;
Roads: UNMAS, OCHA, HDX;

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Average County Rainfall[2]

Impact of Flooding (as reported by KIs)